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STEM RUST AND BARBERRY NEWS

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COOPERATION BETWEEN THE EXTENSION SERVICE AND  
BARBERRY ERADICATION WORK

By

A. L. Pierstorff, Extension Plant Pathologist,  
Ohio State University

The extension service and the barberry eradication work have many problems in common in States where they are both in progress. Each can supplement the other to a large extent, if proper thought and attitude is maintained by the men directing the barberry work and the extension service.

The men in the extension service principally concerned with barberry eradication are the county agents, extension plant pathologists and the cereal extension men. There are a number of things that each or all of these agents could do to promote this work. The absence of black stem rust throughout a State, county, or community is a definite help to all types of extension workers. When one piece of cooperative work with a farmer is satisfactorily executed, it paves the way for other projects.

Assistance from the Extension Specialist

Let's first consider what the extension plant pathologists can do to aid the barberry men. In their travels over the State, the extension men naturally come in contact with a good many grain growers, especially is this true when meetings are held in cereal sections and the diseases of cereal crops are discussed. Even though the pathologist may be discussing the control of stinking smut of wheat, some grower is sure to ask him about stem rust. This is a good opportunity to sell the growers in that meeting the idea of

getting rid of the barberries and tell them of the losses occasioned by black stem rust and the relief they can secure by the help of the Office of Barberry Eradication, if they are not already familiar with the work. Frequently in such meetings certain growers will volunteer the information that they had severe stem rust last year, or that they saw it on some neighbor's farm, or that they know where a barberry bush is located, which the barberry agents missed. This information should be passed on directly to the leader of barberry eradication.

State plant pathologists and the director of the barberry work should frequently confer on problems which are of mutual interest. During the growing season, criticism of certain barberry men may sometimes come from the growers. If unfavorable comments are justified and are passed on to the leader, such faults can usually be corrected before general criticism in a community arises. Very often it is thoughtlessness on the part of the barberry agents, which occasions such comments.

While travelling over the State on cereal inspection work, or survey of cereal diseases, local epidemics of stem rust are sometimes found by the extension specialists. These should be reported immediately to the State Barberry Office. Also such information frequently comes to the extension pathologists through the mail. When such information arrives by mail, a letter is immediately sent to the grower, telling him of the barberry work and that the matter has been referred to the Office of Barberry Eradication and that he can expect someone to visit his farm during the growing season to look for barberries. Where such leads have been followed up, distinct help has resulted and the grower is a booster for the barberry work.

#### Barberry Eradication Leader Should Take Initiative

In the cooperation between the barberry office and the extension service, it seems logical that the leader in the barberry work should take the initiative in soliciting the aid of the extension service. He has one central aim and object in view, while the county agents and extension specialists have many lines of work to consider.

#### The County Agent and Barberry Eradication

Suppose barberry eradication is to begin in certain counties and townships. It would be a great help if preceding this work the barberry leader would make an effort to get acquainted with the county agent and sell this agent the idea of eradicating barberries. Also, assist the agent in writing some news articles. The county agent has a permanent office in the county and has a distinct following among the growers. If he thinks well of the work, there are many ways in which he can boost it.

Before surveying a definite township, letters could be sent to all the men, who are on the county agent's mailing list, in that township. I know that some news articles are used to some extent and circular letters are sent to the farmers, but only addressed to box holders. If such letters carry the signature of the barberry leader, who is relatively new to these farmers, it is apparent that they will not have the same appeal to the growers as if the letters were received from the county agent with whom the growers are acquainted. This would in no way detract from the credit due to the barberry leader in successfully carrying out his work. Many times there will be an opportunity in such a community at a Farm Bureau, Grange, or extension meeting to acquaint the growers in that township with the barberry work. The more familiar the growers are with the work the more favorably they will receive it. Very frequently growers will know before the barberry agents arrive where certain barberry bushes are located. It has been my experience that farmers are very quick to ask either the county agent or extension specialists whether certain bushes are barberries, if the agents have been on their farms and have not found them. Sometimes the farmers are mistaken, but in other cases, we have found bushes, which were ten years old or more that have been overlooked. It is physically impossible for anyone to find all of the barberries on every farm. Where such information is relayed to the barberry office and the bushes are then removed by the barberry agents the farmers feel very kindly toward the work.

#### Barberry Eradication Men can Assist Plant Pathologists

The survey men can be of distinct aid to the extension plant pathologists. In making surveys of rust epidemics, cereal diseases, other than rust, may be encountered, especially outbreaks of stinking smut. The state plant pathologists are always interested in knowing whether stinking smut is on the increase or practically absent throughout the grain area in their State. Where severe cases of bunt occur, these should be reported to either the county agent or to the state plant pathologists, so that such growers will treat their seed wheat, if they plan to use their own seed, or obtain clean seed from their neighbor. A number of severe losses have been averted by this cooperation.

Frequently growers will ask the survey men about troubles on other crops. Sometimes the questions are insignificant and are nothing more than curiosity on the part of the growers. At other times they do involve financial investment. If they are of economic importance, it would be a relatively simple matter to either send specimens to the extension plant pathologists or call them to the attention of the county agent. A number of such occurrences happened this past season and in each case the growers were very grateful for the assistance received.

The county agents are in the best position to be of the most help to the survey men. They can create the right attitude on the part of the growers and pave the way for the barberry men. Agents are usually glad to do it if they are properly informed. Very little additional energy or time need be expended on the part of the agents to perform such services.

#### Cooperation Helpful to all Concerned

In summing up this work, it appears that the closer the Extension Service and the Office of Barberry Eradication can be associated, the more benefit will be derived by both offices.

#### EXTENSION NEWS SERVICE AS AN AID TO STEM RUST CONTROL

By

L. R. Combs, Extension Editor,  
Iowa State College

A news service conducted by an Extension Service or college journalism department can be an important factor in helping control stem rust and eradicate the common barberry by disseminating news and information through the regular news channels of the State, by helping distribute mats or pictures, and by helping with a more intensive news program conducted within the counties where the barberry eradication men are working.

#### The Iowa News Service for 1930

The program herein outlined is based on work done by the news service at Iowa State College, the extension editor and D. R. Shepherd, Barberry Eradication Leader, cooperating. The program is not presented as ideal or as the most complete one possible but merely as a suggestion to other workers.

In regard to the state-wide news releases, two avenues are open in this state; A regular mimeographed news service sent out each day to daily newspapers and BETTER IOWA, the clip sheet sent each week to weekly newspapers. Occasionally the news services such as the Associated Press and United Press carried stories on the progress of the work. Stories telling of the starting of the work in Iowa last spring, what counties the work was done in, the value of the work expressed in dollars and cents saving in small grains, and other details were sent to all papers. Occasionally during the summer stories were sent out telling of the progress of the work, how many bushes had been taken out in certain counties, any unusually heavy escaped areas found and other facts of similar nature. These were followed up, of course, at the end of the season by stories summarizing the season's work.

In regard to the mat service and distribution of pictures, the Extension Service did not do as much this year as it probably will be able to do another year. A mat service for Iowa newspapers was started but did not start functioning until the last of August. Cuts and mats were made of more than 40 specialists and 20 farm scenes of various kinds. A catalog was printed showing the pictures of which mats were available and sent to county agents and newspapers. Those mats from which the paper may cast the cut, are sent out only on request.

However, from the last of August until early in October 45 mats of two different barberry subjects were distributed to 26 different Iowa papers. One picture showed the difference between the common and Japanese barberry bush. Twenty-four of the former and 21 of the latter were distributed. These are in addition to a number of mats and cuts distributed by the barberry eradication men, particularly in the counties where they were working. The mats distributed through the regular mat service went to papers all over Iowa.

#### Intensive Program Where Work is Under Way

A little more intensive program can be conducted in the counties where the eradication work is being done because the papers there naturally are more interested and will carry more material about what is being done in their particular county than will all the papers in the state. The county papers, of course, receive the state-wide stories sent out through the regular news channels mentioned above. These stories are followed up by stories sent direct to the weekly papers or dailies in the counties where the work is to be done. These stories tell when the men arrive, give their names, explain the nature of the work, and the program which is being followed in that county. Special stories concerning the program of the work and a story at the end of the campaign are given to the papers.

Much more detail can be put into the weekly stories than into the stories for state-wide consumption, although care should be taken that they are not padded merely to make long stories. It is better to have several short stories in a paper over a period of two months than to have one or two big long ones. Such facts as which part of the county was more heavily infested, experiences of any farmers with stem rust and estimated loss, large escaped areas, number of bushes and seedlings taken out, and many other facts can be included in the county story. Obviously the more a barberry worker or extension editor can work in names of local people, the better the story is and the more of such stories will the local paper use.

Avoid Issuing Too Many Stories

The barberry workers should keep in mind that flooding the newspapers with stories may do more harm than good. All people, barberry workers, extension editors and all classes of workers are inclined to believe that their work is all important and should have publicity out of all proportion to its actual significance in relation to other work. This does not mean that any one field is not important but that newspapers have only a limited amount of space and must divide it between many subjects. This is the reason why too many stories and too long stories should not be sent to the newspapers.

In the daily news service for 1930, during the season from April to October, probably five stories were sent out for state-wide consumption while about the same number were sent out through the clip sheet for the use of weeklies all over the state. The number of stories which can be used by the weeklies and dailies in the counties where the work is being conducted depends on the stage of the work, its importance in the county, and other factors. In a small grain producing section, where stem rust has been an important economic factor and particularly when some of the barberry stories can be tied up with the experiences of some local farmer or farmers, the papers might easily use a story a week. This brings up the question of the barberry workers getting in touch and keeping in touch with the local editors, which of course is not under control of the state news service.

Another danger in sending too many stories to newspapers is that the material deteriorates from bona fide news to what is commonly, and often properly, termed "propaganda." The work of the barberry eradication office and branches of the experiment stations and Extension Services has enough real news so that it need not bother itself about propaganda or worry about how much material gets printed. The rule should be that when something new happens, when work has progressed far enough since the last story to warrant further information being disseminated, or when information is valuable and timely, it should be given out as news and written as such. If this is done "publicity" will take care of itself and the workers will not need to worry about getting stories in the paper merely for the sake of "publicity."

BOYS AND GIRLS CLUBS AND THE BARBERRY ERADICATION CAMPAIGN

By

Francis B. Powers, Leader of Barberry Eradication  
in Michigan

During the past four years it has been my privilege to do considerable educational work among boys and girls in connection with the Barberry Eradication Campaign. Before coming to Michigan three summers were spent visiting camps of the 4-H Clubs located in various parts of the State of Minnesota. The periods between camps were spent in rust survey, resurvey, scouting with hear-by squads, and demonstration work at county fairs. During the winter months spent in teaching Biology in a St. Paul high school there was also opportunity to do educational work for Barberry Eradication, not only in classes but among outside organizations such as Boy Scout troops and Hi-Y Clubs.

Relation of the Boy and Girl to Barberry Eradication

Work with boys and girls is most fascinating and repaying. Good will toward the eradication campaign has been built up tremendously during the past few years, as there has been created an eagerness on the part of boys and girls to know more about the aims of the campaign. Many of them have returned home from schools, from county fairs, or from 4-H Club meetings with bulletins, sample leaves, and pictures. Their parents have been doubters. They wonder about the connection of the weather with rust, and how the barberry "makes" rust. Many other questions pop into their minds. Jack or Jill returns to school and echoes those questions. Because they would really like to give dad or mother the information, they fix it firmly in their plastic young minds and return home to impart the answers. Then it is that dad becomes anxious to know whether or not he has any common barberries on the place. The children are asked to describe the common barberry bush, and again the alert mind of the boy or girl has missed none of the details.

The Barberry Eradication Representative at the Club Camp

I have been asked how one can find it fascinating to impart such knowledge as the relationship of Berberis vulgaris to Puccinia graminis to a restless group of youngsters varying in age from ten to twenty-one, as do some of the 4-H Club groups. Such groups often include a number of adult visitors. Never mind the adults; consider the group as being under fifteen years of age. Know your subject. Be thoroughly prepared. Have plans for using your material in any time allotted, which may be fifteen minutes or two hours. If possible, get such information far enough ahead of time to have your outline definitely formed. Find out whether you are to speak to a mixed group or to boys and girls separately. Inquire as to whether you are to

appear first or last on the program. Ascertain whether the program is chiefly educational or both educational and entertaining. Know whether or not the play-off for the kittenball championship is to take place immediately following your talk or whether your talk will cut in on the swimming period.

If a choice can be made, speak on the early part of the program, mentioning that bulletins will be distributed at the end of the entire program. Distribution of bulletins preceding or during a program causes inattention during its progress. Sometimes when all programs were so full that my work could not be accommodated, I have been given a private period, sometimes short, sometimes long, with nothing preceding or following. I have talked to girls while boys were assembled elsewhere and visa-versa. I have spoken preceding or following a meal or when rain has spoiled the possibility of out-of-door games. Occasionally time has been given out of a song fest when there were no other speakers. During such private periods it is often possible to use demonstration material to better advantage and invite questions without infringing on the next number.

#### Don't Merely be the Speaker

One is repaid for time taken in making friends with boys and girls at a camp. Don't merely be the speaker. Help stake a tent, go swimming with them, umpire a kittenball game, act as a lawyer or witness at a mock trial, help some group prepare a stunt for stunt night. Make yourself their friend, and you will feel the tug of their confidence in you. They will gladly help you set up your demonstration, run slides in the lantern, or distribute bulletins. Entertaining demonstrations can be used by drilling a few boys and girls in questions and answers concerning the description of a barberry, the method used in killing a barberry, or in actual handling and explanation of the implements and salt used in eradication.

#### The Club Camp Demonstration

In the case of a stationary demonstration or exhibit to be observed during recess periods, considerable interest can be created by spending an unusual amount of time in setting up the demonstration when the children are free to gather around and ask questions. It pays to delay your task, invite questions and answer them. For such a stationary demonstration I use a medium sized potted bush, typical in shape with berries if possible, and place on it labels pointing to each characteristic feature. This is accompanied by display cards with photographs and three Riker mounts size  $8\frac{1}{2}$  by 12 inches, one containing a barberry twig with berries, another rusted stems and heads of grain with a sample of rusted kernels, and a third with good grain stems and heads, with a sample of plump kernels. On one trip this summer the models of the

life cycle were used with my talks and it was found they created much interest when placed on exhibition, especially among older boys and girls who had touched upon the study of black stem rust in high school and adults who were visiting the camp.

#### The Michigan Program for 1930

The barberry eradication program was presented this summer to 1,250 boys and girls at three large sectional gatherings of 4-H Clubs, one at East Lansing in the south-central part of Michigan, one at Gaylord in the north-central part, and one at Chatham in the upper peninsula. At each of these places the boys and girls were spoken to separately in private periods set aside for the talks. At each camp one illustrated lecture on Barberry Eradication and one on Our Bird Friends were given. Dwelling on these birds that eat berries for the pulp, it was again pointed out how barberry bushes happen to be in wild areas. In each of these periods which lasted more than an hour, the last ten minutes was used for open discussion, which proved to be very interesting.

Eight county and special 4-H Club groups, totaling about 350 boys and girls, were scheduled this summer besides the sectional meetings. As some of these were for a day or two only, the programs were crowded and the barberry talk was really an additional sanction on the part of the club leader as if - "If he comes we will let him talk, if he doesn't we will have more time for other things." It is advisable to be sure of a definite place on the program before arriving if possible.

#### Community Picnic A Means of Reaching Adults

At one camp this summer a community picnic was arranged on the day when the girls were to arrive and the boys to leave. About twenty farmers and their wives drove in with the girls and came after the boys. I spoke to the girls and boys, and then while they went swimming, had a very profitable discussion-meeting with the farmers. That day the life cycle models were available and several of the farmers were grateful for the information received.

#### The Rust Busters Help

I believe Dr. Melander and Mr. Fletcher will agree with me that we found the National Rust Busters Club to be a potent factor in the finding of numerous bushes by boys and girls among the 4-H Clubs as well as in the schools in Minnesota. Boys and girls have also gone out and aided in salting bushes that they have found.

They have been presented service medals before their assembled club members. Their interest has carried over from one year to the next, so that bushes have been reported by club members who heard the message the previous year. Reference to N. R. B. C. clubs in various States has been made in the Stem Rust and Barberry News, and I am pleased to notice the progress it is making.

A year ago this spring Mr. John L. Richardson, representing the Conference for the Prevention of Grain Rust, spent some time in Michigan visiting the schools in Ingham County in the interest of the National Rust Busters Club. As a result of this work eleven medals have been awarded to boys and girls who found barberry bushes. By letters sent out from the office and by visitation, the schools throughout the State of Michigan have been brought in contact with the Barberry Eradication Campaign.

The field men are constantly finding farmers who speak little English, but it doesn't take long for the farm boy or girl who goes to school to understand the business of the field men, and in a few words he helps by explaining it to his dad or mother.

#### Club Camps and Schools Build Enthusiasm for Eradication

When we find a farmer well posted concerning the barberry and its relation to black stem rust, this often can be traced to a contact that the boy or girl has made at club camp or in school. Although we have no knowledge of bushes having been found due to work among 4-H clubs this summer, I believe the work in the summer camps, especially the three sectional camps, will help keep alive throughout the State the knowledge that the campaign is still on. Somehow the idea seems to be prevalent in counties where work has been done that all barberries in the county have been removed once and forever. This erroneous idea needs to be replaced by enthusiasm for additional cooperation.

#### EXTENSION MEANS AND AGENCIES

By

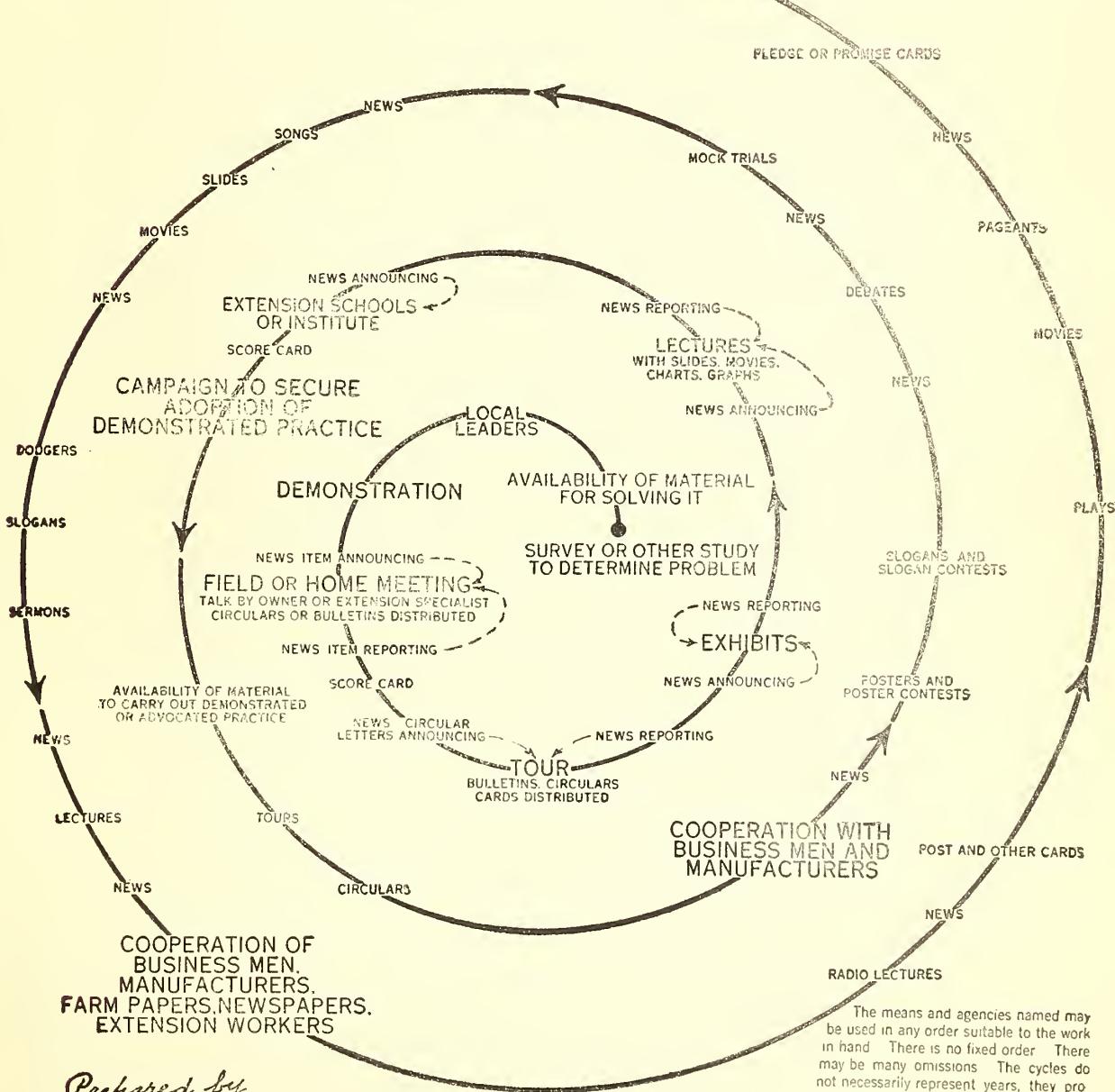
A. B. Graham, In Charge, Subject-Matter Specialists,  
Extension Service, U. S. Department of Agriculture.

During the course of the last few years, progress has been made by extension workers in the use of various means and agencies to establish proven practices. The chart given on the next page has been developed with a view to calling attention to logical procedure in the introduction of a new measure.

A CYCLE SHOWING MEANS AND  
AGENCIES FOR PROMOTING  
THE GENERAL USE OF A PRACTICE  
OF PROVEN VALUE, WITH SPECIAL  
REFERENCE TO CONTINUITY AND  
REPETITION OF THOUGHT

TO THE END THAT THE PRACTICE  
DEMONSTRATED BE ADOPTED BY  
A MAJORITY OF THE PEOPLE —

NEWS ITEM COMPARING RESULTS  
WITH TWO OR THREE YEARS AGO



Prepared by  
A. B. Graham

The means and agencies named may be used in any order suitable to the work in hand. There is no fixed order. There may be many omissions. The cycles do not necessarily represent years, they properly represent periods of progress and may be one, two, three or four years.



In making an application of means and agencies named, start at the center of the cycle. The making of a preliminary survey or other study in a community will show whether the problem is serious or not. The next step will be to determine the availability of material to be used in the new practice. Following this one must usually secure the cooperation of certain persons who are willing to use the new measure and put on demonstrations showing that the method is effective. In the first attempt to bring the demonstration to the attention of the people there may be only a limited number who understand and who are willing to bring the lesson to the attention of others. Their success furnishes local proof that the method is effective. Other agencies must now be used to spread to people the fact that the method is effective. All the demonstrations should be well distributed over the community. An effort should be made to cause general acceptance through the various means and agencies mentioned in the cycle.

The time has now arrived for organizing these means and agencies into a method of presentation to secure general adoption. This is the campaign stage and may cover several months or even a few years, during which time a still greater number of means and agencies than those already named may be used. The purpose in using a variety of means and agencies is to present an old truth in new clothes. It is necessary to do this because people's attention is attracted and interest aroused during the presentation of a lesson in a great variety of forms. What may reach one, may not reach another. The mind of the learner may be so taken up at one presentation that it is not susceptible to the depth of impression necessary to secure action. The order of presentation in the diagram is not fixed. It may be given in any order adaptable to the season, opportunity, or other condition arising suitable to their use. Different organizations or adjustments and a variety of appeals are necessary to reach the great mass of people. And so it is in the way of barberry eradication methods, the practice must be brought to the attention and understanding of people in a variety of ways to the end that the demonstrated practices be adopted by a majority of the people. In barberry eradication, of course, one trusts that it is 100 per cent.

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"Following is a paragraph which was recently copied from a letter of suspension applicable to an expense account submitted for the month of September, 1930.

"2. Auto mileage statement in duplicate \$84.35 suspended for the following reasons: The travel from September 1 to 13 appears to represent mileage incurred at ----- to and from fair grounds and also for the same purpose at -----, -----, with return mileage to and

from ----- and it should be shown in connection with travel on each date why street cars or railway could not have been used at considerable less expense. This is necessary since the law providing for auto mileage authorizes the same only when the cost of travel can be reduced thereby. The charges for mileage between ----- and ----- should also be supported by a statement showing why it was impracticable to perform travel by street car. It is noted that during the period covered by the mileage statement you were on an actual expense subsistence basis."

"The auto mileage statement and duplicate are returned herewith."

#### EASTERN REGION

##### Ohio - 8 East Broad Street, Columbus - Harry Atwood

The second survey of Miami County was completed on October 31 and on this date our field season closed for the year. During October 129 barberry bushes were found and destroyed on 41 properties in Miami County.

The writer attended the annual meeting of the Extension workers at Ohio State University, the third week in October. (Nov. 10)

##### Indiana - Agricultural Experiment Station, La Fayette - Wayne E. Leer

About 18 months ago, some cooperative research work along ecological lines was started with Dr. Winona H. Welch, then of the Botany Department of Indiana University but now of the Botany Department of DePauw University. Dr. Welch recently visited the area being studied and makes the following report:

"In May, 1929, there was a carpet of seedlings around the four parent bushes which were cut at the ground lines in the fall of 1928. In November, 1929, only seven seedlings were remaining. However, in May, 1930, 55 seedlings were found in the area 15 feet 1 inch by 19 feet 7 inches surrounding the parent bushes. On October 11, 1930, not one seedling could be found in spite of a very careful search. Perhaps the absence of seedlings is due to the extremely dry, hot weather of the past summer.

"On October 11, 1930, 16 living shoots and long dead shoots were found on the original four parent stumps, the tallest shoot being 46 inches high.

The bushes on the south facing slope which had been mapped in November, 1929, had been treated with salt in May, 1930, and not one was living on October 11, 1930.

"Six new bushes were found in the mapped area of the slope. Five were in one cluster, the largest being 9 $\frac{1}{2}$  inches. The two points of occupation were about ten feet apart, one below the other. All six bushes were pulled and the two areas marked as well as the locations designated on the map."

The work being done by Dr. Welch and her students is fundamental and it is very gratifying to learn that she expects to continue these important studies even though she has changed her position from Indiana University to DePauw University. (Nov. 3)

Illinois - Box 72, Post Office Building, Urbana - Robert W. Bills

Plans are under way for educational activities among Boy Scout troops in Illinois. An offer to search for barberry bushes has come from the Starved Rock Area Council. Mr. Davis met the Eagle Scout troop at the State Fair in August and Mr. Mick is planning to talk to a troop at Libertyville this week. The results thus far have been excellent. It is a live organization and educational activities with it will be very beneficial.

The Leader met the De Kalb County teachers at a regular assembly of rural teachers on November 14. Lesson material were given out at that time. This plan seems to be the most satisfactory one for distributing the literature files. The county superintendent always has an opportunity to endorse the material and recommend its use in the schools. This, with a short talk by the Leader explaining the campaign and the value of teaching about the black stem rust and the common barberry, has a good effect upon the teachers.

Local labor was being used in both squads which remained in the field in order to take advantage of the excellent fall weather for effective scouting. Mr. Weber's squad in Whiteside County has done some very effective work by cleaning up four wild areas in which the bushes had reached the fruiting stage since the last resurvey. The Lake County squad is completing the second survey of the rural section of Lake County, working now just outside of Lake

Forest. Scattered bushes are being found almost daily. (Nov. 5)

#### WESTERN REGION

##### Minnesota - University Farm, St. Paul - Leonard W. Melander

The fall survey work in Minnesota which consists of second survey in Dakota County and resurvey in Fillmore County has been making good progress during the last month. The early frosts and the unusually fine weather since the frosts has made survey conditions perfect. Although we do not expect to be able to complete the second survey of Dakota County this year, our progress has been much more rapid than during the summer survey. So far this year, 506 bushes, sprouting bushes, and seedlings have been found in this county on 52 properties. We have observed rust spreading from at least seven locations. A total of about 2,045 bushes, sprouting bushes, and seedlings have been found on about 17 properties on resurvey in Fillmore County during the last month.

The educational work in the rural schools has also made good progress during the past month. Mr. Stanley P. Swenson, who is in charge of this work this year, already has visited most of the 160 rural schools of Goodhue County. In addition, he has spoken in behalf of the barberry eradication campaign at several teachers' institutes in other counties. As soon as the intensive school campaign is completed in Goodhue County, Mr. Swenson will proceed to Lac Qui Parle County and continue with the same type of educational work. We plan to cover three counties if possible this fall in this manner.

Besides giving the pupils some information regarding the history of the Barberry Eradication Campaign, the characteristics of the bush, and its relation to black stem rust, Mr. Swenson is explaining how the pupils may receive medals and become life members of the National Rust Busters Club by finding locations of common barberry bushes and reporting them to the St. Paul Barberry Office. As a result, we have received at least 25 samples from different locations of common barberry from school children in Goodhue County. Medals are being presented as soon as the locations are investigated. Since January 1 a total of 50 medals have been awarded. (Nov. 10)

District No. 1 - State College Station, Fargo, N. Dak. - George C. Mayoue.

Montana

Since September 20, three agents have been carrying on second survey in Fergus County. From October 8 to 16 they surveyed on the Miller Ranch along the Ross Fork of the Judith River, where small seedlings were found. Mr. Ivar Twilde, the assistant leader, believes that more escaped bushes will be located in that area. He states that to date they have missed only one day's work in the field on account of inclement weather. This is an excellent record for October.

The week end of October 18 the agents made a trip to headquarters at Bozeman in accordance with advice from the District Leader. While there they conferred with the Montana collaborator, Mr. H. E. Morris; selected educational materials, including literature, specimens, plates, etc. for use in connection with work which soon will be conducted in the rural and urban schools of Fergus County. They also succeeded in persuading a property owner in Bozeman to agreeably permit the destruction of his barberries. In a letter to the District Leader, Mr. Morris evidenced his pleasure and satisfaction with the conference which he had with these agents on October 18.

Mr. James Copeland, one of the Montana agents, is making preliminary arrangements for educational activities which will be begun in the near future.

North Dakota

Three agents are conducting field survey in this State. They are working in Stutsman County, approximately 15 miles northeast of Jamestown where seedlings are being located in the proximity of sprouting bushes that were located early in September by a National Rust Buster, Marjorie Andres. Within a few days the survey activities of the season will be closed and the balance of the field work during the fall will be devoted to educational activities in the schools. Plans have already been made with Miss Mary E. Cusator, county superintendent of Stutsman County, for organizing all of the students from the first to the eighth grades inclusive of that county into the National Rust Busters Club, which already has given very good results in this State. Stutsman County was selected for this work particularly because of the find made early in September by

Marjorie Andres, a 12-year old girl of the fifth grade, who discovered the barberries while looking for plums on her aunt's farm near Buchanan. She became interested in looking for barberries as a result of the Rust Buster Club work carried on last spring in Barnes County. Therefore, the publicity and demonstrations made in connection with her find makes for a good setting or background for the Rust Buster work in this County.

Demonstrations were made at the Washburn Livestock Show and the Corn Show at Wilton. According to Mr. Lockrem, the agent in charge, these demonstrations attracted a great many of the people attending these shows. The county agent of these communities was particularly pleased with the demonstrations, according to a letter which he wrote to the District Leader.

#### Wyoming

The work in Crook County, Wyoming, in District No. 1, closed September 30. Data are now being compiled covering the season's activities in that portion of the District. (Oct. 25)

#### District No. 3 - Agricultural College, Ft. Collins, Colo. - E. A. Lungren

The first of November, field activities were closed in Colorado. Practically all of Douglas County had been completed on second survey. Most of the month of October was devoted to foot-scouting Plumb Creek which runs the entire length of the county. Three large bushes were found along this creek. The weather throughout the month of October was ideal and the boys were able to work every day.

Our educational work has been progressing in Colorado and Wyoming during the month of October. The District Leader has given seven lectures on barberry eradication to college classes. One moving picture show was also given in which the barberry film was used. Considerable interest was shown in the work and this educational phase has been extended into the laboratories of the agriculture and science divisions of the college.

We have also circularized the schools in Wyoming and as soon as our lesson plan is completed we will send out our teaching materials in that State.